

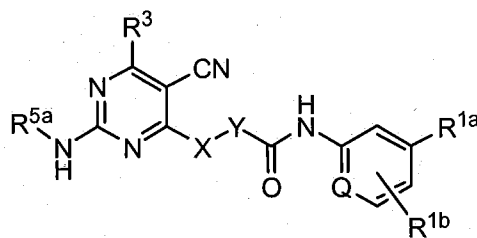
**AMENDMENTS TO THE CLAIMS:**

This listing of claims will replace all prior versions, and listings, of claims in the Application.

**LISTING OF CLAIM**

1-12. (cancelled).

13. (currently amended) A compound according to Formula III,

**III**

or a pharmaceutically acceptable salt thereof, wherein:

$R^{1a}$  is selected from halogen, lower perfluoroalkyl,  $-\text{NO}_2$ , and optionally substituted  $\text{C}_{1-4}$  alkyl; and  $R^{1b}$  is selected from halogen,  $-\text{N}(\text{R}^5)\text{R}^5$ ,  $-\text{SR}^5$ , perfluoroalkyl, and optionally substituted lower alkyl;

$R^3$  is independently selected from  $-\text{H}$ , halogen, trihalomethyl,  $-\text{CN}$ ,  $-\text{NO}_2$ ,  $-\text{OR}^5$ ,  $-\text{N}(\text{R}^5)\text{OR}^5$ ,  $-\text{ON}(\text{R}^5)\text{R}^5$ ,  $-\text{N}(\text{R}^5)\text{N}(\text{R}^5)\text{R}^5$ ,  $-\text{N}(\text{R}^5)\text{R}^5$ ,  $-\text{S}(\text{O})_{0-2}\text{R}^5$ ,  $-\text{SO}_2\text{N}(\text{R}^5)\text{R}^5$ ,  $-\text{CO}_2\text{R}^5$ ,  $-\text{C}(\text{O})\text{N}(\text{R}^5)\text{R}^5$ ,  $-\text{N}(\text{R}^5)\text{SO}_2\text{R}^5$ ,  $-\text{N}(\text{R}^5)\text{C}(\text{O})\text{R}^5$ ,  $-\text{N}(\text{R}^5)\text{CO}_2\text{R}^5$ ,  $-\text{C}(\text{O})\text{R}^5$ ,  $-\text{C}(=\text{NR}^7)\text{N}(\text{R}^5)\text{R}^5$ ,  $-\text{C}(=\text{NR}^7)\text{R}^5$ ,  $-\text{C}(=\text{NR}^7)\text{OR}^5$ ,  $-\text{N}(\text{R}^5)\text{C}(=\text{NR}^7)\text{N}(\text{R}^5)\text{R}^5$ , optionally substituted lower alkyl, optionally substituted lower alkenyl, optionally substituted lower alkynyl, optionally substituted aryl, optionally substituted heterocyclyl, optionally substituted heterocyclylalkyl, and optionally substituted arylalkyl;

$R^{5a}$  is H;

each  $R^5$  is independently selected from -H, optionally substituted lower alkyl, optionally substituted aryl, optionally substituted lower arylalkyl, optionally substituted heterocyclyl, and optionally substituted lower heterocyclalkyl; or

two of  $R^5$ , together with the atom or respective atoms to which they are attached, can combine to form an optionally substituted three- to seven-membered heterocyclic;

each  $R^6$  is independently selected from -H, halogen, trihalomethyl, -CN, -NO<sub>2</sub>, -NH<sub>2</sub>, -OR<sup>5</sup>, -N(R<sup>5</sup>)R<sup>5</sup>, -S(O)<sub>0-2</sub>R<sup>5</sup>, -SO<sub>2</sub>N(R<sup>5</sup>)R<sup>5</sup>, -CO<sub>2</sub>R<sup>5</sup>, -C(O)N(R<sup>5</sup>)R<sup>5</sup>, -N(R<sup>5</sup>)SO<sub>2</sub>R<sup>5</sup>, -N(R<sup>5</sup>)C(O)R<sup>5</sup>, -N(R<sup>5</sup>)CO<sub>2</sub>R<sup>5</sup>, -C(O)R<sup>5</sup>, optionally substituted lower alkyl, optionally substituted aryl, optionally substituted heterocyclyl, optionally substituted heterocyclalkyl, and optionally substituted arylalkyl; or

two of  $R^6$ , together with the atom or atoms to which they are attached, can combine to form one of an optionally substituted three to seven-membered alicyclic, and an optionally substituted three to seven-membered heteroalicylic;

each  $R^7$  is independently selected from -H, -CN, -NO<sub>2</sub>, -N(R<sup>5</sup>)R<sup>5</sup>, -OR<sup>5</sup>, -S(O)<sub>0-2</sub>R<sup>5</sup>, -SO<sub>2</sub>N(R<sup>5</sup>)R<sup>5</sup>, -CO<sub>2</sub>R<sup>5</sup>, optionally substituted lower alkyl, optionally substituted lower alkenyl, and optionally substituted lower alkynyl; or

$R^5$  and  $R^7$ , together with the atom or atoms to which they are attached, can combine to form a five- to seven-membered optionally substituted heterocyclyl;

each of X and Y is independently selected from -C(=O)-, -C(R<sup>6</sup>)R<sup>6</sup>-, -O-, -N(R<sup>5</sup>)-, -C(=NR<sup>7</sup>)-, and -S(O)<sub>0-2</sub>-; provided when X is -O- or -N(R<sup>5</sup>)-, then Y cannot contain phenyl, naphthyl, cyclohexyl, dihydronaphthyl tetrahydronaphthyl, or a five- to six-membered heteroaryl, each optionally substituted; and

Q is either =N- or =C(H)-.

14. (previously presented) The compound according to claim 13, wherein  $R^{1a}$  is selected from -NO<sub>2</sub>, halogen, perfluoroalkyl, haloalkyl, and optionally substituted C<sub>1-2</sub>alkyl.

15. (original) The compound according to claim 14, wherein  $R^3$  is selected from optionally substituted  $-O-C_{1-4}alkyl$ ,  $-O-C_{1-4}perfluoroalkyl$ , optionally substituted  $-N(H)C_{1-4}alkyl$ , optionally substituted  $-N(C_{1-4}alkyl)C_{1-4}alkyl$ , optionally substituted  $-S(O)_{0-2}-C_{1-4}alkyl$ , and optionally substituted  $-S(O)_{0-2}-C_{1-4}perfluoroalkyl$ .
16. (original) The compound according to claim 15, wherein Y is either  $-N(H)-$  or  $-C(R^6)R^6-$ .
17. (original) The compound according to claim 16, wherein X is selected from  $-O-$ ,  $-N(R^5)-$  and  $-S-$ .
18. (original) The compound according to claim 17, wherein Y is  $-C(R^6)R^6-$ ; wherein each  $R^6$  is independently selected from  $-H$ , halogen, trihalomethyl,  $-NH_2$ , optionally substituted  $-O-C_{1-4}alkyl$ , optionally substituted  $-N(H)C_{1-4}alkyl$ , optionally substituted  $-S-C_{1-4}alkyl$ , optionally substituted lower alkyl, optionally substituted heterocyclyl, and optionally substituted heterocyclylalkyl.
19. (original) The compound according to claim 18, wherein Y is  $-C(H)R^6-$ ; wherein  $R^6$  is independently selected from  $-H$ , halogen, trihalomethyl,  $-NH_2$ , optionally substituted  $-O-C_{1-4}alkyl$ , optionally substituted  $-N(H)C_{1-4}alkyl$ , optionally substituted  $-S-C_{1-4}alkyl$ , optionally substituted lower alkyl, optionally substituted heterocyclyl, and optionally substituted heterocyclylalkyl.
20. (original) The compound according to claim 19, wherein Q is  $=C(H)-$ .
- 21-28. (cancelled)
29. (previously presented) The compound according to claim 13, wherein  $R^{1a}$  is selected from halo, lower perfluoroalkyl,  $-NO_2$ , and optionally substituted  $C_{1-4}alkyl$ .
- 30-33. (Cancelled)
34. (previously presented) A compound selected from Table 3.

**Table 3**

Entry	Name	Structure
1	2-[(3-cyano-4,6-dimethyl-5-nitropyridin-2-yl)oxy]-N-[3-(trifluoromethyl)phenyl]acetamide	
5	N <sup>2</sup> -[2-amino-6-(methylthio)pyrimidin-4-yl]-N-[3-(trifluoromethyl)phenyl]glycinamide	
7	2-{[2-amino-5-cyano-6-(methylthio)pyrimidin-4-yl]thio}-N-[3-(methyloxy)phenyl]acetamide	
9	2-{[2-amino-5-cyano-6-(methylthio)pyrimidin-4-yl]thio}-N-(4-chlorophenyl)acetamide	
11	2-{[2-amino-5-cyano-6-(methylthio)pyrimidin-4-yl]thio}-N-(3-chlorophenyl)acetamide	

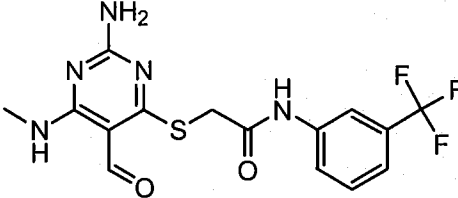
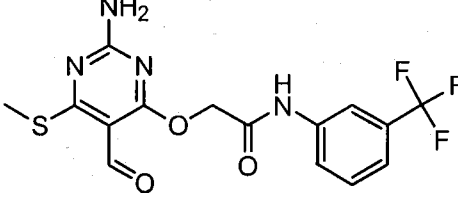
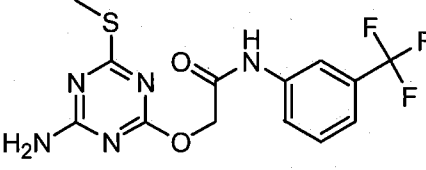
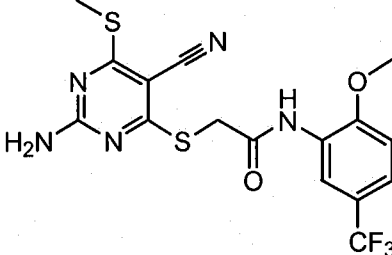
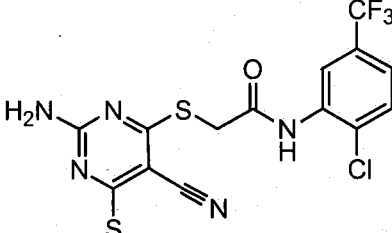
Table 3

Entry	Name	Structure
14	2- {[2-amino-5-cyano-6-(methylthio)pyrimidin-4-yl]oxy}-N-[3-(trifluoromethyl)phenyl]acetamide	
16	2- {[2-amino-5-cyano-6-(methylthio)pyrimidin-4-yl]thio}-N-methyl-N-[3-(trifluoromethyl)phenyl]acetamide	
17	N <sup>2</sup> -[4-amino-6-(methylthio)-1,3,5-triazin-2-yl]-N-[3-(trifluoromethyl)phenyl]glycinamide	
20	N <sup>2</sup> -[2-amino-5-cyano-6-(methylthio)pyrimidin-4-yl]-N-[3-(trifluoromethyl)phenyl]glycinamide	
30	2-amino-4-({2-[2,5-bis(methoxy)phenyl]-2-oxoethyl}thio)-6-(methylthio)pyrimidine-5-carbonitrile	
31	2- {[2-amino-5-cyano-6-(methylthio)pyrimidin-4-yl]thio}-N-[4-fluoro-3-(trifluoromethyl)phenyl]acetamide	

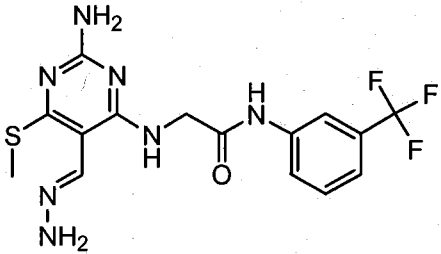
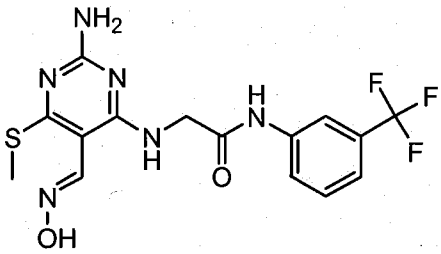
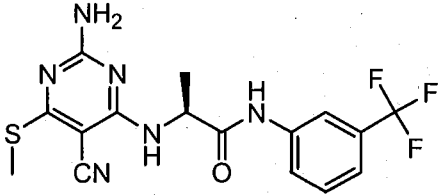
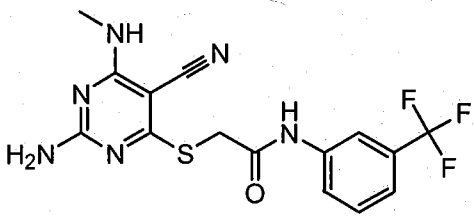
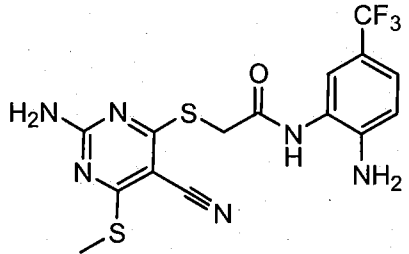
Table 3

Entry	Name	Structure
34	2-{{2-amino-5-cyano-6-(methylthio)pyrimidin-4-yl}thio}-N-[4-chloro-3-(trifluoromethyl)phenyl]acetamide	
35	2-amino-4-(methylthio)-6-({2-oxo-1-[3-(trifluoromethyl)phenyl]pyrrolidin-3-yl}thio)pyrimidine-5-carbonitrile	
36	2-{{2-amino-5-cyano-6-(methylthio)pyrimidin-4-yl}thio}-N-[6-(trifluoromethyl)pyridin-2-yl]acetamide	
37	2-{{2-amino-5-cyano-6-(methylthio)pyrimidin-4-yl}thio}-N-[4-(trifluoromethyl)pyridin-2-yl]acetamide	
41	2-{{2-(acetylamino)-5-cyano-6-(methylthio)pyrimidin-4-yl}thio}-N-[3-(trifluoromethyl)phenyl]acetamide	
42	(2S)-2-{{2-amino-5-cyano-6-(methylthio)pyrimidin-4-yl}oxy}-N-[3-(trifluoromethyl)phenyl]propanamide	

**Table 3**

Entry	Name	Structure
45	2-{{2-amino-5-formyl-6-(methylamino)pyrimidin-4-yl}thio}-N-[3-(trifluoromethyl)phenyl]acetamide	
46	2-{{2-amino-5-formyl-6-(methylthio)pyrimidin-4-yl}oxy}-N-[3-(trifluoromethyl)phenyl]acetamide	
47	2-{{[4-amino-6-(methylthio)-1,3,5-triazin-2-yl]oxy}-N-[3-(trifluoromethyl)phenyl]acetamide	
54	2-{{[2-amino-5-cyano-6-(methylthio)pyrimidin-4-yl]thio}-N-[2-(methoxy)-5-(trifluoromethyl)phenyl]acetamide	
55	2-{{[2-amino-5-cyano-6-(methylthio)pyrimidin-4-yl]thio}-N-[2-chloro-5-(trifluoromethyl)phenyl]acetamide	

**Table 3**

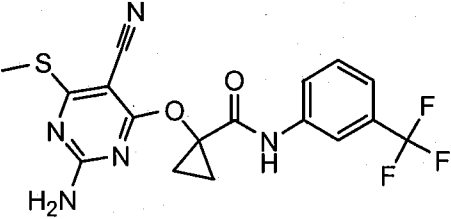
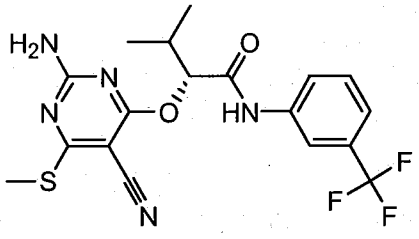
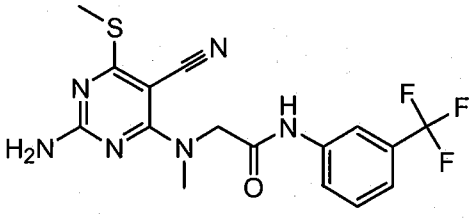
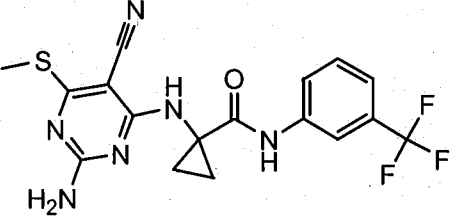
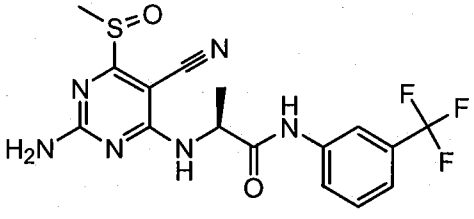
Entry	Name	Structure
58	N <sup>2</sup> -[2-amino-5-[(E)-hydrazonomethyl]-6-(methylthio)pyrimidin-4-yl]-N-[3-(trifluoromethyl)phenyl]glycinamide	
59	N <sup>2</sup> -[2-amino-5-[(E)-(hydroxyimino)methyl]-6-(methylthio)pyrimidin-4-yl]-N-[3-(trifluoromethyl)phenyl]glycinamide	
60	N <sup>2</sup> -[2-amino-5-cyano-6-(methylthio)pyrimidin-4-yl]-N-[3-(trifluoromethyl)phenyl]-L-alaninamide	
61	2-{[2-amino-5-cyano-6-(methylamino)pyrimidin-4-yl]thio}-N-[3-(trifluoromethyl)phenyl]acetamide	
62	2-{[2-amino-5-cyano-6-(methylthio)pyrimidin-4-yl]thio}-N-[2-amino-5-(trifluoromethyl)phenyl]acetamide	



**Table 3**

Entry	Name	Structure
63	2-amino-4-(methylthio)-6-({[6-(trifluoromethyl)-1H-benzimidazol-2-yl]methyl}thio)pyrimidine-5-carbonitrile	
64	2-[2-amino-5-cyano-6-(methylthio)pyrimidin-4-yl]-N-[3-(trifluoromethyl)phenyl]hydrazinecarboxamide	
65	N <sup>2</sup> -[5-cyano-2-(methylamino)-6-(methylthio)pyrimidin-4-yl]-N-[3-(trifluoromethyl)phenyl]glycinamide	
66	2-{[2-amino-5-cyano-6-(dimethylamino)pyrimidin-4-yl]thio}-N-[3-(trifluoromethyl)phenyl]acetamide	
67	(S)-1-[2-amino-5-cyano-6-(methylthio)pyrimidin-4-yl]-N-[3-(trifluoromethyl)phenyl]prolinamide	
68	(2R)-2-{[2-amino-5-cyano-6-(methylthio)pyrimidin-4-yl]oxy}-N-[3-(trifluoromethyl)phenyl]propanamide	

**Table 3**

Entry	Name	Structure
69	1-{{2-amino-5-cyano-6-(methylthio)pyrimidin-4-yl}oxy}-N-[3-(trifluoromethyl)phenyl]cyclopropane carboxamide	
70	(2S)-2-{{2-amino-5-cyano-6-(methylthio)pyrimidin-4-yl}oxy}-3-methyl-N-[3-(trifluoromethyl)phenyl]butanamide	
72	N <sup>2</sup> -[2-amino-5-cyano-6-(methylthio)pyrimidin-4-yl]-N-2-methyl-N-[3-(trifluoromethyl)phenyl]glycinamide	
73	1-{{2-amino-5-cyano-6-(methylthio)pyrimidin-4-yl}amino}-N-[3-(trifluoromethyl)phenyl]cyclopropane carboxamide	
74	N <sup>2</sup> -[2-amino-5-cyano-6-(methylsulfinyl)pyrimidin-4-yl]-N-[3-(trifluoromethyl)phenyl]-L-alaninamide	

**Table 3**

Entry	Name	Structure
75	N <sup>2</sup> -[2-amino-5-cyano-6-(methylsulfonyl)pyrimidin-4-yl]-N-[3-(trifluoromethyl)phenyl]-L-alaninamide	
76	N <sup>2</sup> -(5-cyano-2-morpholin-4-ylpyrimidin-4-yl)-N-[3-(trifluoromethyl)phenyl]glycinamide	
78	N <sup>2</sup> -[2-amino-5-cyano-6-(methoxy)pyrimidin-4-yl]-N-[3-(trifluoromethyl)phenyl]-L-alaninamide	
79	N <sup>2</sup> -[2-amino-5-cyano-6-(methylthio)pyrimidin-4-yl]-N-[2-(methoxy)-5-(trifluoromethyl)phenyl]-L-alaninamide	
80	N <sup>2</sup> -[2-amino-5-cyano-6-(methylthio)pyrimidin-4-yl]-N-[2-chloro-5-(trifluoromethyl)phenyl]-L-alaninamide	
83	N <sup>2</sup> -[2-amino-5-cyano-6-(methylthio)pyrimidin-4-yl]-N-[3-(trifluoromethyl)phenyl]-D-alaninamide	

Table 3

Entry	Name	Structure
84	2-[(2-amino-5-cyano-6-morpholin-4-yl)pyrimidin-4-ylthio]-N-[3-(trifluoromethyl)phenyl]acetamide	
85	(R)-1-[2-amino-5-cyano-6-(methylthio)pyrimidin-4-yl]-N-[3-(trifluoromethyl)phenyl]prolinamide	
86	N <sup>2</sup> -[2-amino-5-cyano-6-(methylthio)pyrimidin-4-yl]-N-[3-(trifluoromethyl)phenyl]-L-ornithinamide	
87	N <sup>2</sup> -[2-amino-5-cyano-6-(methylthio)pyrimidin-4-yl]-N-2-[2-(dimethylamino)ethyl]-N-[3-(trifluoromethyl)phenyl]glycinamide	
88	N <sup>2</sup> -[2-amino-5-cyano-6-(ethoxy)pyrimidin-4-yl]-N-[3-(trifluoromethyl)phenyl]-L-alaninamide	

**Table 3**

Entry	Name	Structure
89	N <sup>2</sup> -(2,6-diamino-5-cyanopyrimidin-4-yl)-N-[3-(trifluoromethyl)phenyl]-L-alaninamide	
90	N <sup>2</sup> -(2-amino-5-cyanopyrimidin-4-yl)-N-[3-(trifluoromethyl)phenyl]-L-alaninamide	
91	N <sup>2</sup> -[2-amino-5-cyano-6-(methylthio)pyrimidin-4-yl]-N-2-methyl-N-[3-(trifluoromethyl)phenyl]-L-alaninamide	
93	2-[2-amino-5-cyano-6-(methylthio)pyrimidin-4-yl]-1,2-dimethyl-N-[3-(trifluoromethyl)phenyl]hydrazinecarboxamide	
94	N <sup>2</sup> -[2-amino-5-cyano-6-(methylthio)pyrimidin-4-yl]-N-[3-amino-5-(trifluoromethyl)phenyl]-L-alaninamide	
95	ethyl [1-[2-amino-5-cyano-6-(methylthio)pyrimidin-4-yl]-2-({[3-(trifluoromethyl)phenyl]amino}carbonyl)hydrazino]acetate	

Table 3

Entry	Name	Structure
96	2-[2-amino-5-cyano-6-(methylthio)pyrimidin-4-yl]-2-methyl-N-[3-(trifluoromethyl)phenyl]hydrazinecarboxamide	
100	N <sup>2</sup> -[5-cyano-2-(methylthio)pyrimidin-4-yl]-N-[3-(trifluoromethyl)phenyl]glycinamide	
101	N <sup>2</sup> -[2-amino-5-cyano-6-(methylthio)pyrimidin-4-yl]-N-2-(tetrahydro-2H-pyran-4-ylmethyl)-N-[3-(trifluoromethyl)phenyl]glycinamide	
102	N <sup>2</sup> -(2-amino-5-cyano-6-([2-(dimethylamino)ethyl]oxy)pyrimidin-4-yl)-N-[3-(trifluoromethyl)phenyl]-L-alaninamide	
103	N <sup>2</sup> -[2-amino-5-cyano-6-(methylthio)pyrimidin-4-yl]-N-6-[[[(1,1-dimethylethyl)oxy]carbonyl]-N-[3-(trifluoromethyl)phenyl]-L-lysineamide	

**Table 3**

Entry	Name	Structure
104	2-amino-4-(methylthio)-6-(methyl{(1S)-1-[6-(trifluoromethyl)-1H-benzimidazol-2-yl]ethyl}amino)pyrimidine-5-carbonitrile	
105	N <sup>2</sup> -[2-amino-5-cyano-6-(methylthio)pyrimidin-4-yl]-N-2-[2-(tetrahydro-2H-pyran-4-yl)ethyl]-N-[3-(trifluoromethyl)phenyl]glycinamide	
106	N <sup>2</sup> -[2-amino-5-cyano-6-(methylthio)pyrimidin-4-yl]-N-[3-[[2-(diethylamino)ethyl]amino]-5-(trifluoromethyl)phenyl]-L-alaninamide	
107	2-amino-4-(methylthio)-6-(((1S)-1-[6-(trifluoromethyl)-1H-benzimidazol-2-yl]ethyl)amino)pyrimidine-5-carbonitrile	
108	2-{2-amino-5-cyano-6-[1-(3-trifluoromethyl-phenylcarbamoyl)-1S-ethylamino]-pyrimidin-4-ylamino}-N-(3-trifluoromethyl-phenyl)-2S-propionamide	

**Table 3**

Entry	Name	Structure
109	N <sup>2</sup> -[2-amino-5-cyano-6-(methylthio)pyrimidin-4-yl]-N-2-methyl-N-(3-methylphenyl)glycinamide	
110	N <sup>2</sup> -[2-amino-5-cyano-6-(methylthio)pyrimidin-4-yl]-N-2-methyl-N-[3-(1-methylethyl)phenyl]glycinamide	
111	N <sup>2</sup> -[2-amino-5-cyano-6-(methylthio)pyrimidin-4-yl]-N-5-[imino(nitroamino)methyl]-N-[3-(trifluoromethyl)phenyl]-L-ornithinamide	
112	methyl 3-({N-[2-amino-5-cyano-6-(methylthio)pyrimidin-4-yl]-L-alanyl}amino)-5-(trifluoromethyl)benzoate	
113	N <sup>2</sup> -[2-amino-5-cyano-6-(methylthio)pyrimidin-4-yl]-N-(3-nitrophenyl)-L-alaninamide	
114	N <sup>2</sup> -[2-amino-5-cyano-6-(methylthio)pyrimidin-4-yl]-N-[3-(trifluoromethyl)phenyl]-L-lysινamide	



Table 3

Entry	Name	Structure
115	N <sup>2</sup> -[2-amino-5-cyano-6-(propyloxy)pyrimidin-4-yl]-N-[3-(trifluoromethyl)phenyl]-L-alaninamide	
117	N <sup>2</sup> -[2-amino-5-cyano-6-(methylthio)pyrimidin-4-yl]-N-[3-(trifluoromethyl)phenyl]-L-argininamide	
118	N <sup>2</sup> -[2-amino-5-cyano-6-(methylsulfinyl)pyrimidin-4-yl]-N-2-methyl-N-[3-(trifluoromethyl)phenyl]-L-alaninamide	
119	N <sup>2</sup> -[2-amino-5-cyano-6-(methyloxy)pyrimidin-4-yl]-N-2-methyl-N-[3-(trifluoromethyl)phenyl]-L-alaninamide	
120	N <sup>2</sup> -[2-amino-5-cyano-6-(propyloxy)pyrimidin-4-yl]-N-2-methyl-N-[3-(trifluoromethyl)phenyl]-L-alaninamide	
121	N <sup>2</sup> -[2-amino-5-cyano-6-(ethyloxy)pyrimidin-4-yl]-N-2-methyl-N-[3-(trifluoromethyl)phenyl]-L-alaninamide	

Table 3

Entry	Name	Structure
122	N <sup>2</sup> -{2-amino-5-cyano-6-[(1-methylethyl)oxy]pyrimidin-4-yl}-N-[3-(trifluoromethyl)phenyl]-L-alaninamide	
123	N-5-acetyl-N-2-[2-amino-5-cyano-6-(methylthio)pyrimidin-4-yl]-N-[3-(trifluoromethyl)phenyl]-L-ornithinamide	
124	N <sup>2</sup> -[2-amino-5-cyano-6-(methylthio)pyrimidin-4-yl]-N-(3-aminophenyl)-L-alaninamide	
125	3-({N-[2-amino-5-cyano-6-(methylthio)pyrimidin-4-yl]-L-alanyl}amino)-N-[2-(dimethylamino)ethyl]-5-(trifluoromethyl)benzamide	
126	2-(methyloxy)ethyl ((4S)-4-([2-amino-5-cyano-6-(methylthio)pyrimidin-4-yl]amino)-5-oxo-5-[3-(trifluoromethyl)phenyl]amino)pentyl)carbamate	

**Table 3**

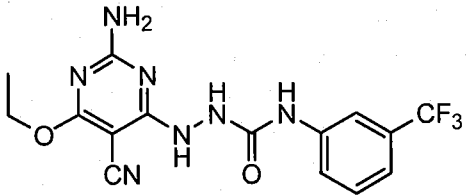
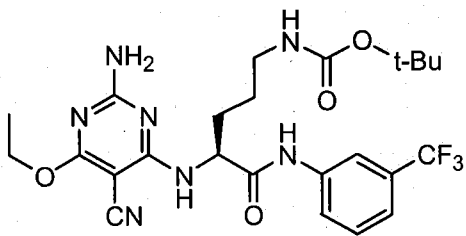
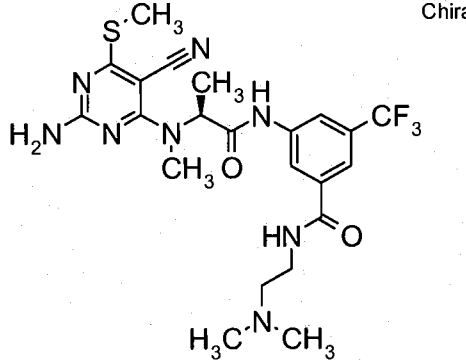
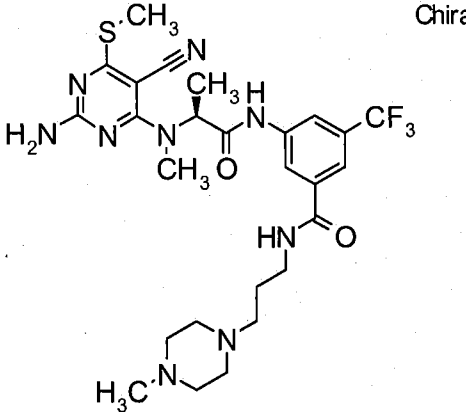
Entry	Name	Structure
127	2-[2-amino-5-cyano-6-(ethyloxy)pyrimidin-4-yl]-N-[3-(trifluoromethyl)phenyl]hydrazinecarboxamide	
128	1,1-dimethylethyl ((4S)-4-([2-amino-5-cyano-6-(ethyloxy)pyrimidin-4-yl]amino)-5-oxo-5-([3-(trifluoromethyl)phenyl]amino)pentyl)carbamate	
130	3-({N-[2-amino-5-cyano-6-(methylthio)pyrimidin-4-yl]-N-methyl-L-alanyl}amino)-N-[2-(dimethylamino)ethyl]-5-(trifluoromethyl)benzamide	 <p style="text-align: right;">Chiral</p>
131	3-({N-[2-amino-5-cyano-6-(methylthio)pyrimidin-4-yl]-N-methyl-L-alanyl}amino)-N-[3-(4-methylpiperazin-1-yl)propyl]-5-(trifluoromethyl)benzamide	 <p style="text-align: right;">Chiral</p>

Table 3

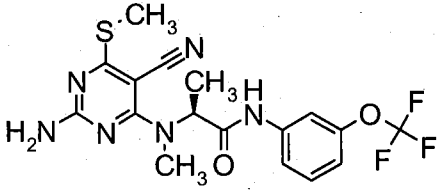
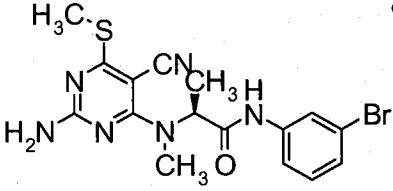
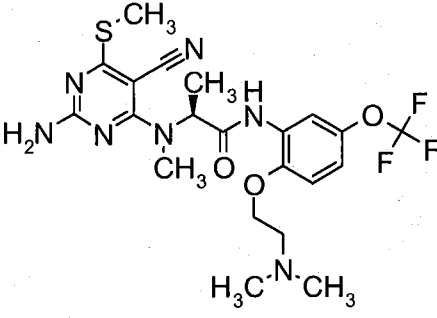
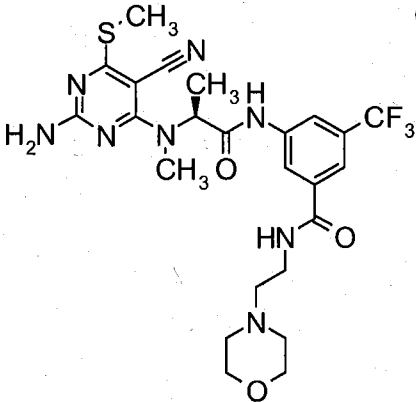
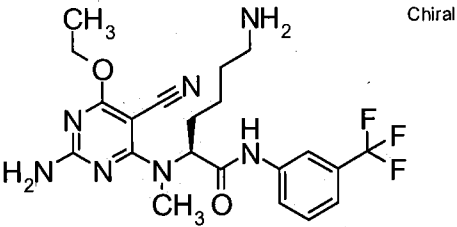
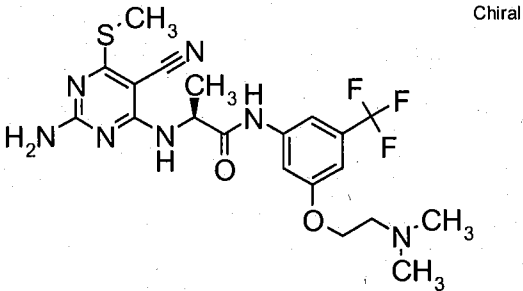
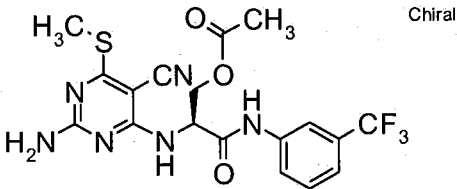
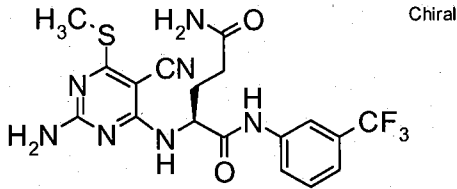
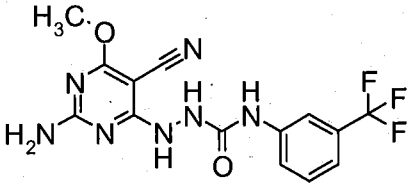
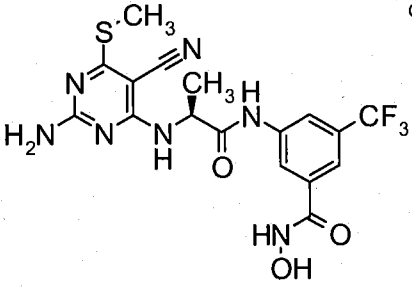
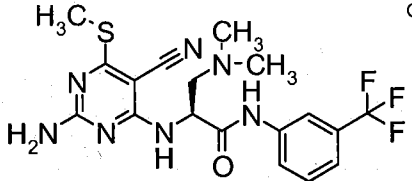
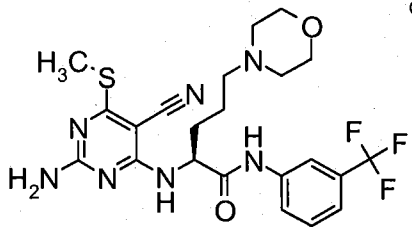
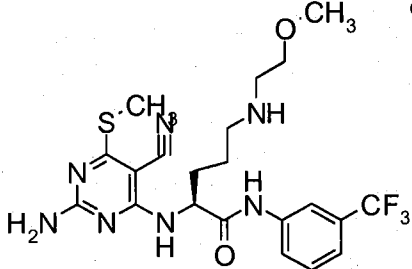
Entry	Name	Structure
132	N <sup>2</sup> -[2-amino-5-cyano-6-(methylthio)pyrimidin-4-yl]-N~2~-methyl-N-{3-[(trifluoromethyl)oxy]phenyl}-L-alaninamide	 <p>Chiral</p>
133	N <sup>2</sup> -[2-amino-5-cyano-6-(methylthio)pyrimidin-4-yl]-N-(3-bromophenyl)-N~2~-methyl-L-alaninamide	 <p>Chiral</p>
134	N <sup>2</sup> -[2-amino-5-cyano-6-(methylthio)pyrimidin-4-yl]-N-{2-[[2-(dimethylamino)ethyl]oxy]-5-[(trifluoromethyl)oxy]phenyl}-N~2~-methyl-L-alaninamide	 <p>Chiral</p>
135	3-({N-[2-amino-5-cyano-6-(methylthio)pyrimidin-4-yl]-N-methyl-L-alanyl}amino)-N-(2-morpholin-4-ylethyl)-5-(trifluoromethyl)benzamide	 <p>Chiral</p>

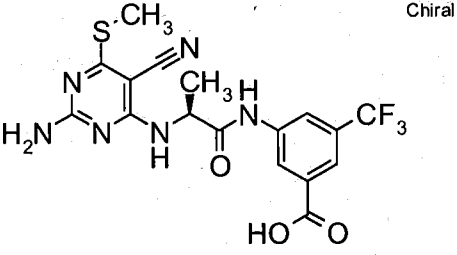
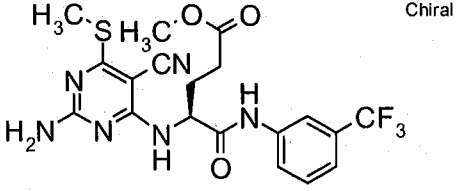
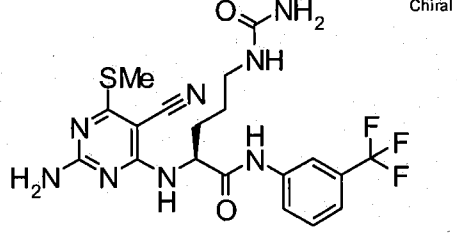
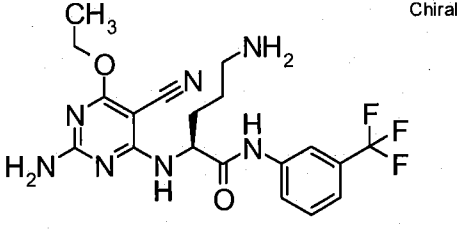
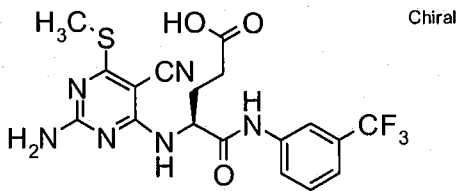
Table 3

Entry	Name	Structure
136	N <sup>2</sup> -[2-amino-5-cyano-6-(ethyloxy)pyrimidin-4-yl]-N~2~-methyl-N-[3-(trifluoromethyl)phenyl]-L-lysineamide	
137	N <sup>2</sup> -[2-amino-5-cyano-6-(methylthio)pyrimidin-4-yl]-N-[3-[[2-(dimethylamino)ethyl]oxy]-5-(trifluoromethyl)phenyl]-L-alanineamide	
138	(2S)-2-[[2-amino-5-cyano-6-(methylthio)pyrimidin-4-yl]amino]-3-oxo-3-[[3-(trifluoromethyl)phenyl]amino]propyl acetate	
139	N <sup>2</sup> -[2-amino-5-cyano-6-(methylthio)pyrimidin-4-yl]-N~1~-[3-(trifluoromethyl)phenyl]-L-glutamineamide	
140	2-[2-amino-5-cyano-6-(methyloxy)pyrimidin-4-yl]-N-[3-(trifluoromethyl)phenyl]hydrazinecarboxamide	

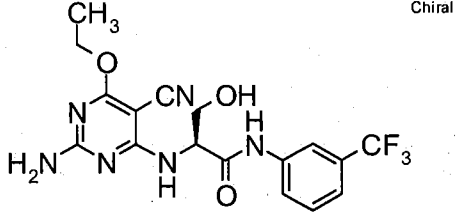
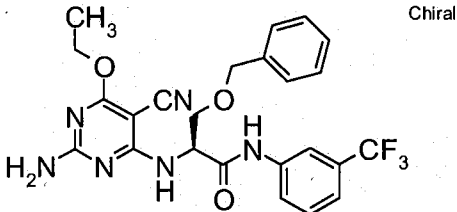
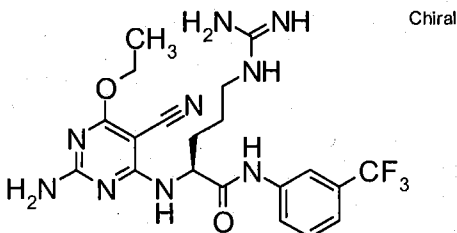
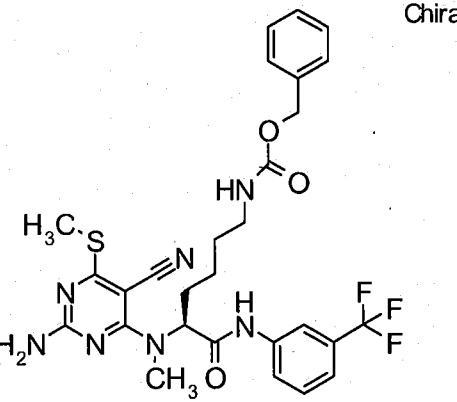
**Table 3**

Entry	Name	Structure
141	3-({N-[2-amino-5-cyano-6-(methylthio)pyrimidin-4-yl]-L-alanyl}amino)-N-hydroxy-5-(trifluoromethyl)benzamide	
142	N <sup>2</sup> -[2-amino-5-cyano-6-(methylthio)pyrimidin-4-yl]-3-(dimethylamino)-N-[3-(trifluoromethyl)phenyl]-L-alaninamide	
143	N <sup>2</sup> -[2-amino-5-cyano-6-(methylthio)pyrimidin-4-yl]-5-morpholin-4-yl-N-[3-(trifluoromethyl)phenyl]-L-norvalinamide	
144	N <sup>2</sup> -[2-amino-5-cyano-6-(methylthio)pyrimidin-4-yl]-N~5~-[2-(methyloxy)ethyl]-N-[3-(trifluoromethyl)phenyl]-L-ornithinamide	

**Table 3**

Entry	Name	Structure
145	3-({N-[2-amino-5-cyano-6-(methylthio)pyrimidin-4-yl]-L-alanyl}amino)-5-(trifluoromethyl)benzoic acid	
146	methyl N~2~-[2-amino-5-cyano-6-(methylthio)pyrimidin-4-yl]-N-[3-(trifluoromethyl)phenyl]-L-alpha-glutamate	
147	N <sup>5</sup> -(aminocarbonyl)-N~2~-[2-amino-5-cyano-6-(methylthio)pyrimidin-4-yl]-N-[3-(trifluoromethyl)phenyl]-L-ornithinamide	
148	N <sup>2</sup> -[2-amino-5-cyano-6-(ethoxy)pyrimidin-4-yl]-N-[3-(trifluoromethyl)phenyl]-L-ornithinamide	
149	N <sup>2</sup> -[2-amino-5-cyano-6-(methylthio)pyrimidin-4-yl]-N-[3-(trifluoromethyl)phenyl]-L-alpha-glutamine	

**Table 3**

Entry	Name	Structure
150	N <sup>2</sup> -[2-amino-5-cyano-6-(ethyloxy)pyrimidin-4-yl]-N-[3-(trifluoromethyl)phenyl]-L-serinamide	
151	N <sup>2</sup> -[2-amino-5-cyano-6-(ethyloxy)pyrimidin-4-yl]-O-(phenylmethyl)-N-[3-(trifluoromethyl)phenyl]-L-serinamide	
152	N <sup>2</sup> -[2-amino-5-cyano-6-(ethyloxy)pyrimidin-4-yl]-N-[3-(trifluoromethyl)phenyl]-L-argininamide	
153	N <sup>2</sup> -[2-amino-5-cyano-6-(methylthio)pyrimidin-4-yl]-N~2~-methyl-N <sup>6</sup> -{[(phenylmethyl)oxy]carbonyl}-N-[3-(trifluoromethyl)phenyl]-L-lysινamide	



**Table 3**

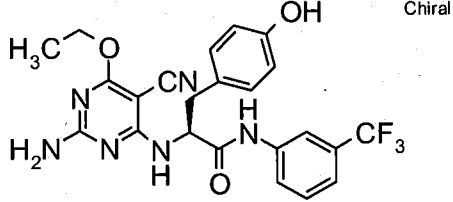
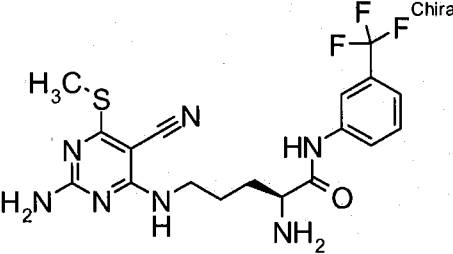
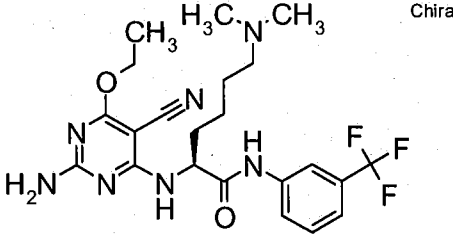
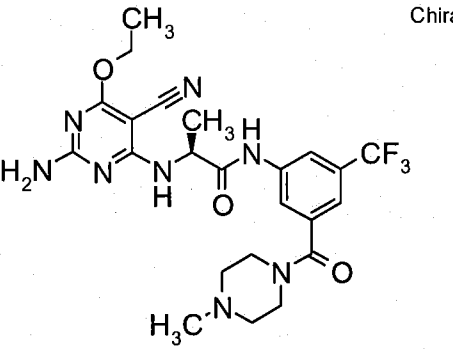
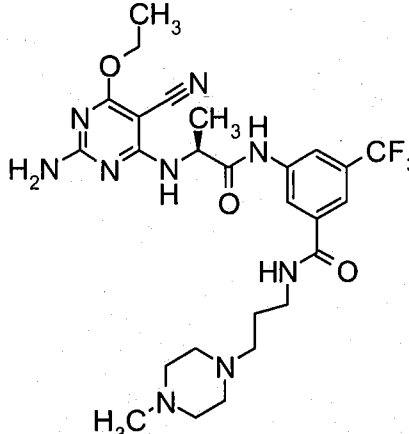
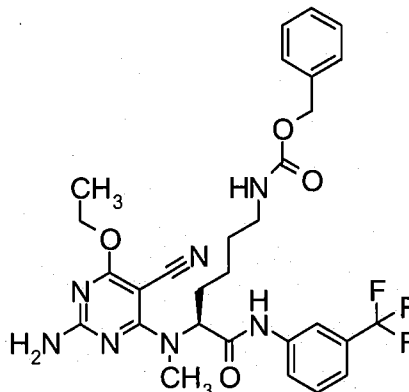
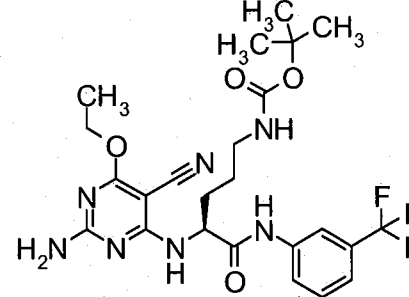
Entry	Name	Structure
154	N- $\alpha$ -[2-amino-5-cyano-6-(ethyloxy)pyrimidin-4-yl]-N-[3-(trifluoromethyl)phenyl]-L-tyrosinamide	
155	N <sup>5</sup> -[2-amino-5-cyano-6-(methylthio)pyrimidin-4-yl]-N-[3-(trifluoromethyl)phenyl]-L-ornithinamide	
156	N <sup>2</sup> -[2-amino-5-cyano-6-(ethyloxy)pyrimidin-4-yl]-N-6~,N-6~-dimethyl-N-[3-(trifluoromethyl)phenyl]-L-lysineamide	
157	N <sup>2</sup> -[2-amino-5-cyano-6-(ethyloxy)pyrimidin-4-yl]-N-[3-[(4-methylpiperazin-1-yl)carbonyl]-5-(trifluoromethyl)phenyl]-L-alanineamide	

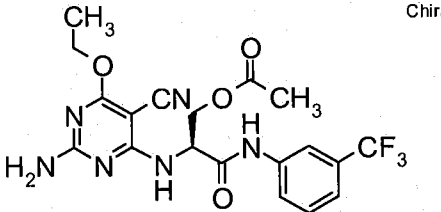
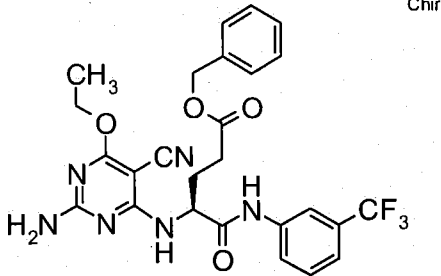
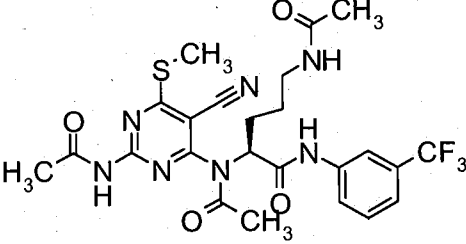
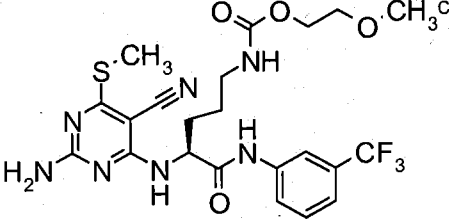
Table 3

Entry	Name	Structure
158	3-({N-[2-amino-5-cyano-6-(ethyloxy)pyrimidin-4-yl]-L-alanyl}amino)-N-(3-pyrrolidin-1-ylpropyl)-5-(trifluoromethyl)benzamide	<p>Chiral</p>
159	3-({N-[2-amino-5-cyano-6-(ethyloxy)pyrimidin-4-yl]-L-alanyl}amino)-N-(2-morpholin-4-ylethyl)-5-(trifluoromethyl)benzamide	<p>Chiral</p>
160	3-({N-[2-amino-5-cyano-6-(ethyloxy)pyrimidin-4-yl]-L-alanyl}amino)-N-[2-(dimethylamino)ethyl]-5-(trifluoromethyl)benzamide	<p>Chiral</p>

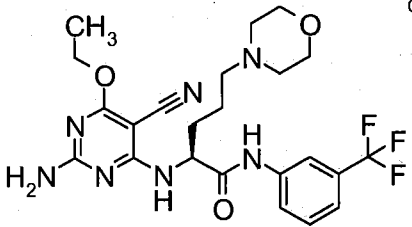
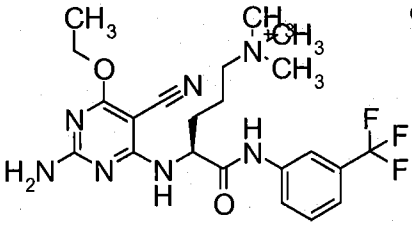
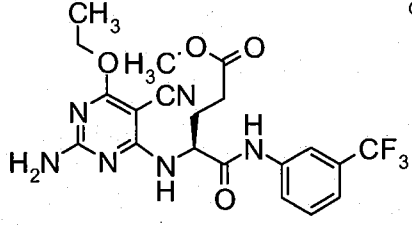
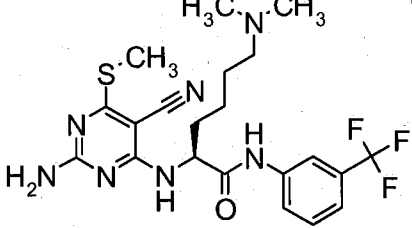
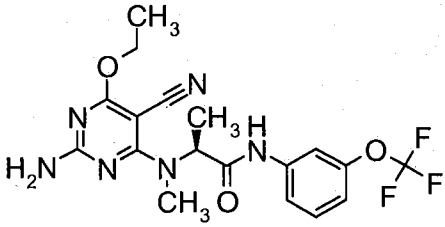
Table 3

Entry	Name	Structure
161	3-({N-[2-amino-5-cyano-6-(ethyloxy)pyrimidin-4-yl]-L-alanyl}amino)-N-[3-(4-methylpiperazin-1-yl)propyl]-5-(trifluoromethyl)benzamide	 <p>Chiral</p>
162	N <sup>2</sup> -[2-amino-5-cyano-6-(ethyloxy)pyrimidin-4-yl]-N <sup>2</sup> -methyl-N <sup>6</sup> -{[(phenylmethyl)oxy]carbonyl}-N-[3-(trifluoromethyl)phenyl]-L-lysineamide	 <p>Chiral</p>
163	1,1-dimethylethyl ((4S)-4-{[2-amino-5-cyano-6-(ethyloxy)pyrimidin-4-yl]amino}-5-oxo-5-{[3-(trifluoromethyl)phenyl]amino}pentyl)carbamate	 <p>Chiral</p>

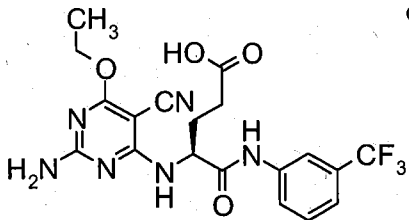
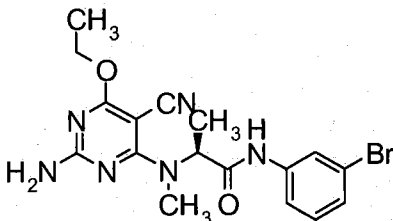
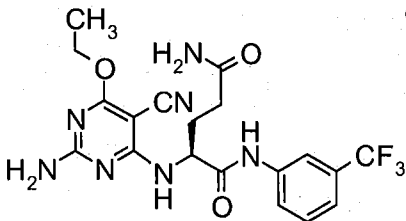
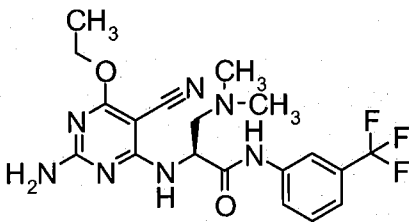
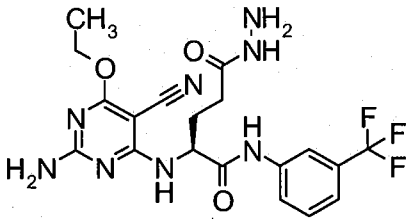
**Table 3**

Entry	Name	Structure
164	(2S)-2-[[2-amino-5-cyano-6-(ethyloxy)pyrimidin-4-yl]amino]-3-oxo-3-[[3-(trifluoromethyl)phenyl]amino]propyl acetate	
165	phenylmethyl N~2~-[2-amino-5-cyano-6-(ethyloxy)pyrimidin-4-yl]-N-[3-(trifluoromethyl)phenyl]-L-alpha-glutamate	
166	N <sup>2</sup> , N <sup>5</sup> -diacetyl-N~2~-[2-(acetylamino)-5-cyano-6-(methylthio)pyrimidin-4-yl]-N-[3-(trifluoromethyl)phenyl]-L-ornithinamide	
167	2-(methyloxy)ethyl ((4S)-4-[[2-amino-5-cyano-6-(methylthio)pyrimidin-4-yl]amino]-5-oxo-5-[[3-(trifluoromethyl)phenyl]amino]pentyl)carbamate	

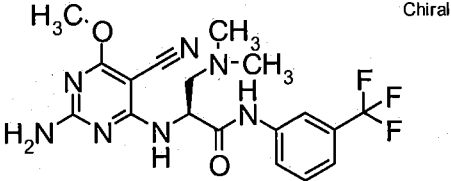
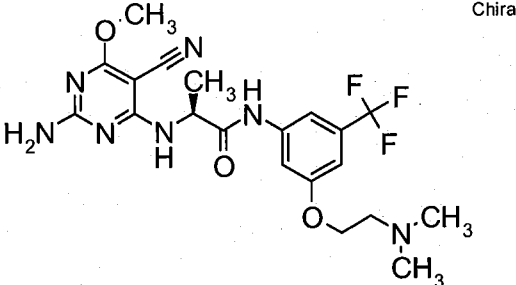
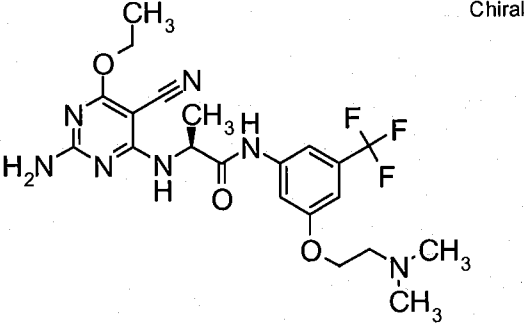
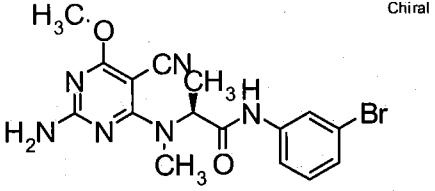
**Table 3**

Entry	Name	Structure
168	N <sup>2</sup> -[2-amino-5-cyano-6-(ethyloxy)pyrimidin-4-yl]-5-morpholin-4-yl-N-[3-(trifluoromethyl)phenyl]-L-norvalinamide	 Chiral
169	N-((4S)-4-[[2-amino-5-cyano-6-(ethyloxy)pyrimidin-4-yl]amino]-5-oxo-5-[[3-(trifluoromethyl)phenyl]amino]pentyl)-N,N-dimethylmethanaminium	 Chiral
170	Methyl N <sup>2</sup> -[2-amino-5-cyano-6-(ethyloxy)pyrimidin-4-yl]-N-[3-(trifluoromethyl)phenyl]-L-alpha-glutamate	 Chiral
171	N <sup>2</sup> -[2-amino-5-cyano-6-(methylthio)pyrimidin-4-yl]-N-6~,N~6~-dimethyl-N-[3-(trifluoromethyl)phenyl]-L-lysineamide	 Chiral
172	N <sup>2</sup> -[2-amino-5-cyano-6-(ethyloxy)pyrimidin-4-yl]-N-2~-methyl-N-{3-[(trifluoromethoxy)phenyl]}-L-alaninamide	 Chiral

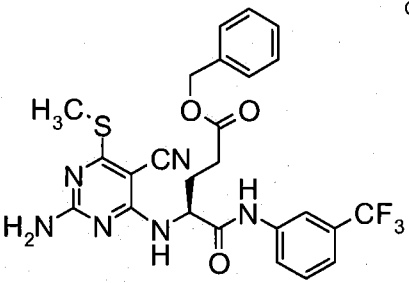
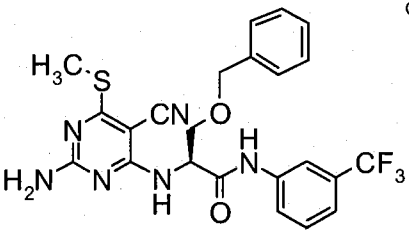
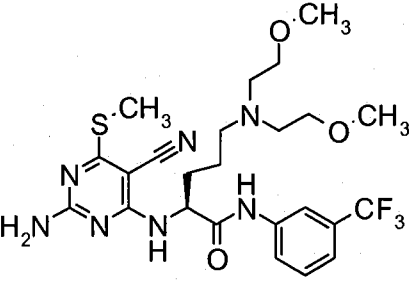
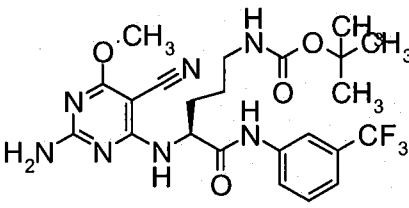
**Table 3**

Entry	Name	Structure
173	N <sup>2</sup> -[2-amino-5-cyano-6-(ethyloxy)pyrimidin-4-yl]-N-[3-(trifluoromethyl)phenyl]-L-alpha-glutamine	 Chiral
174	N~2~-[2-amino-5-cyano-6-(ethyloxy)pyrimidin-4-yl]-N-(3-bromophenyl)-N~2~-methyl-L-alaninamide	 Chiral
175	N <sup>2</sup> -[2-amino-5-cyano-6-(ethyloxy)pyrimidin-4-yl]-N <sup>1</sup> -[3-(trifluoromethyl)phenyl]-L-glutamamide	 Chiral
176	N <sup>2</sup> -[2-amino-5-cyano-6-(ethyloxy)pyrimidin-4-yl]-3-(dimethylamino)-N-[3-(trifluoromethyl)phenyl]-L-alaninamide	 Chiral
177	2-(2-amino-5-cyano-6-ethoxypyrimidin-4-ylamino)-5-hydrazinyl-5-oxo-N-(3-(trifluoromethyl)phenyl)pentanamide	 Chiral

**Table 3**

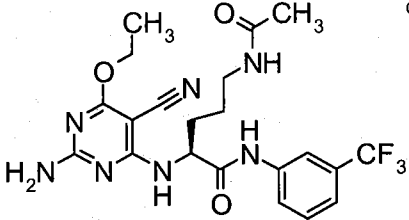
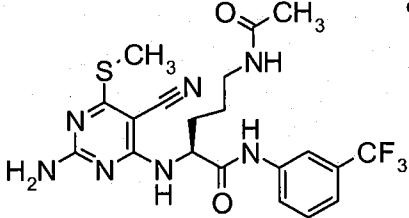
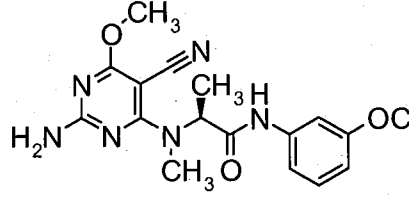
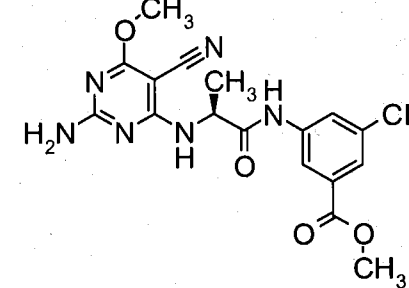
Entry	Name	Structure
178	N <sup>2</sup> -[2-amino-5-cyano-6-(methyloxy)pyrimidin-4-yl]-3-(dimethylamino)-N-[3-(trifluoromethyl)phenyl]-L-alaninamide	
179	N <sup>2</sup> -[2-amino-5-cyano-6-(methyloxy)pyrimidin-4-yl]-N-[3-[[2-(dimethylamino)ethyl]oxy]-5-(trifluoromethyl)phenyl]-L-alaninamide	
180	N <sup>2</sup> -[2-amino-5-cyano-6-(ethyloxy)pyrimidin-4-yl]-N-[3-[[2-(dimethylamino)ethyl]oxy]-5-(trifluoromethyl)phenyl]-L-alaninamide	
181	N <sup>2</sup> -[2-amino-5-cyano-6-(methyloxy)pyrimidin-4-yl]-N-(3-bromophenyl)-N <sup>2</sup> -methyl-L-alaninamide	

**Table 3**

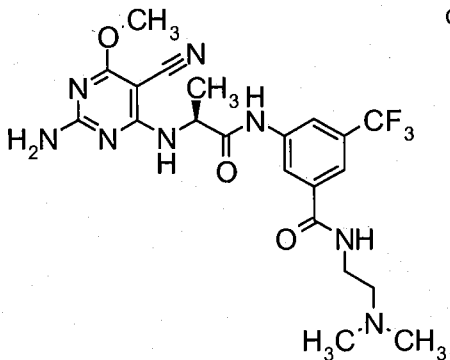
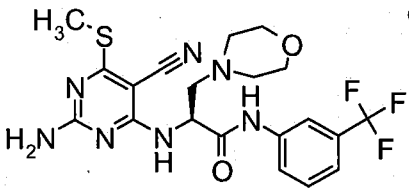
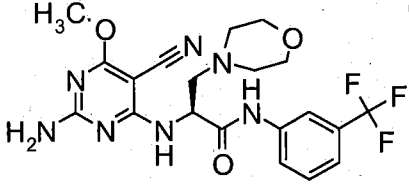
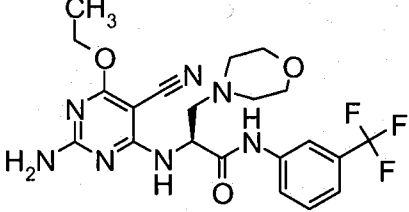
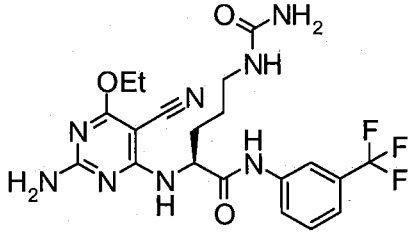
Entry	Name	Structure
182	phenylmethyl N <sup>2</sup> -[2-amino-5-cyano-6-(methylthio)pyrimidin-4-yl]-N-[3-(trifluoromethyl)phenyl]-L-alpha-glutamate	
183	N <sup>2</sup> -[2-amino-5-cyano-6-(methylthio)pyrimidin-4-yl]-O-(phenylmethyl)-N-[3-(trifluoromethyl)phenyl]-L-serinamide	
184	N <sup>2</sup> -[2-amino-5-cyano-6-(methylthio)pyrimidin-4-yl]-N-5~,N-5~-bis[2-(methoxy)ethyl]-N-[3-(trifluoromethyl)phenyl]-L-ornithinamide	
185	1,1-dimethylethyl ((4S)-4-{[2-amino-5-cyano-6-(methoxy)pyrimidin-4-yl]amino}-5-oxo-5-{[3-(trifluoromethyl)phenyl]amino}pentyl)carbamate	



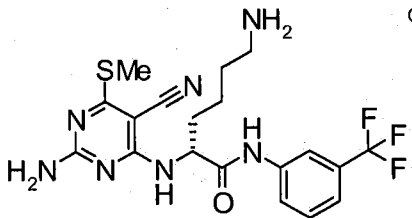
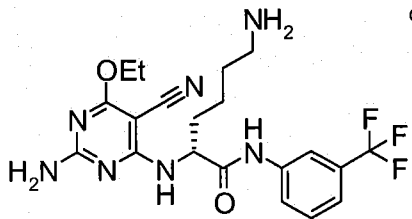
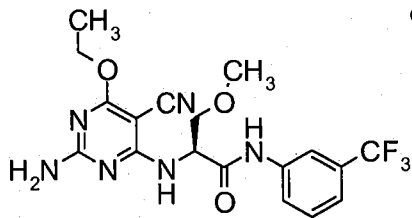
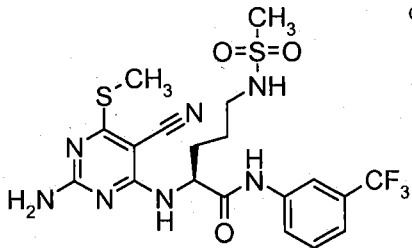
**Table 3**

Entry	Name	Structure
186	N <sup>5</sup> -acetyl- N <sup>2</sup> -[2-amino-5-cyano-6-(ethyloxy)pyrimidin-4-yl]-N-[3-(trifluoromethyl)phenyl]-L-ornithinamide	
187	N <sup>5</sup> -acetyl- N <sup>2</sup> -[2-amino-5-cyano-6-(methylthio)pyrimidin-4-yl]-N-[3-(trifluoromethyl)phenyl]-L-ornithinamide	
188	N <sup>2</sup> -[2-amino-5-cyano-6-(methyloxy)pyrimidin-4-yl]- N <sup>2</sup> -methyl-N-{3-[(trifluoromethyl)oxy]phenyl}-L-alaninamide	
189	methyl 3-({N-[2-amino-5-cyano-6-(methyloxy)pyrimidin-4-yl]-L-alanyl}amino)-5-(trifluoromethyl)benzoate	

**Table 3**

Entry	Name	Structure
190	3-({N-[2-amino-5-cyano-6-(methyloxy)pyrimidin-4-yl]-L-alanyl}amino)-N-[2-(dimethylamino)ethyl]-5-(trifluoromethyl)benzamide	
191	N <sup>2</sup> -[2-amino-5-cyano-6-(methylthio)pyrimidin-4-yl]-3-morpholin-4-yl-N-[3-(trifluoromethyl)phenyl]-L-alaninamide	
192	N <sup>2</sup> -[2-amino-5-cyano-6-(methyloxy)pyrimidin-4-yl]-3-morpholin-4-yl-N-[3-(trifluoromethyl)phenyl]-L-alaninamide	
193	N <sup>2</sup> -[2-amino-5-cyano-6-(ethyloxy)pyrimidin-4-yl]-3-morpholin-4-yl-N-[3-(trifluoromethyl)phenyl]-L-alaninamide	
194	N <sup>5</sup> -(aminocarbonyl)-N <sup>2</sup> -[2-amino-5-cyano-6-(ethyloxy)pyrimidin-4-yl]-N-[3-(trifluoromethyl)phenyl]-L-ornithinamide	

**Table 3**

Entry	Name	Structure
195	N~2~- [2-amino-5-cyano-6-(methylthio)pyrimidin-4-yl]-N-[3-(trifluoromethyl)phenyl]-D-lysynamide	
196	N <sup>2</sup> -[2-amino-5-cyano-6-(ethyloxy)pyrimidin-4-yl]-N-[3-(trifluoromethyl)phenyl]-D-lysynamide	
197	N <sup>2</sup> -[2-amino-5-cyano-6-(ethyloxy)pyrimidin-4-yl]-O-methyl-N-[3-(trifluoromethyl)phenyl]-L-serinamide	
198	N <sup>2</sup> -[2-amino-5-cyano-6-(methylthio)pyrimidin-4-yl]-N~5~- (methylsulfonyl)-N-[3-(trifluoromethyl)phenyl]-L-ornithinamide	

35. (previously presented) A pharmaceutical composition comprising the compound according to claims 13 and a pharmaceutically acceptable carrier.
36. (cancelled).

37. (currently amended) A method of modulating *in vivo* activity of a kinase, the method comprising administering to a subject an effective amount of a composition comprising a compound according to claim 13, wherein the kinase is p70S6K.

38. (cancelled).

39. (currently amended) The method according to claim ~~38~~ 37, wherein modulating the *in vivo* activity of p70S6K comprises inhibition of p70S6K.

40. (previously presented) A method of treating diseases or disorders associated with uncontrolled, abnormal, and/or unwanted cellular activities, the method comprising administering, to a mammal in need thereof, a therapeutically effective amount of a composition comprising a compound according to claim 13.

41. (previously presented) A method of screening for modulator of a p70S6 kinase, the method comprising combining either a compound according to claim 13, and at least one candidate agent and determining the effect of the candidate agent on the activity of said kinase.

42. (previously presented) A method of inhibiting proliferative activity in a cell, the method comprising administering an effective amount of: the compound according to claim 13.

43. (currently amended) A method of inhibiting abnormal metabolic activity in a cell, the method comprising administering an effective amount of: the compound according to ~~any of~~ claim 13.